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Web Port Data Leakage Prevention Solution

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ABSTRACT

In recent years, the Internet and related technologies have grown rapidly. It offered the unequaled capability to access and redistribute digital data. However, as more organizations move to technology, the need for robust security controls has also increased. Data is the most valuable resource of an organization that needs to be secured. Hence, data leakage poses a crucial issue for companies as the number of incidents continues to increase.

Identifying legitimate data loss can be very challenging as each incident contains different characteristics which require extensive reviews. This limits the ability to detect data loss alerts in real-time making organizations vulnerable to financial and reputational damages. This research aims to strengthen the data loss detection capabilities of a DLP system by monitoring the data transfer web ports.

This research would develop a Machine Learning and Data Science based DLP solution that has the features of file monitoring and authorization management, that would detect any unauthorized actions and block the specific data from disclosure. Furthermore, score-based reports would be generated consisting of the user actions for security purposes.

Keywords - Data loss prevention solution, Machine learning, Data Science, Sensitive data